

The present invention is directed to a biaxial elastic stretch, breathable laminate including one of several combinations of facing materials and breathable elastic films. In one embodiment, an unnecked nonwoven facing material that is elastomeric in both a machine direction and a cross direction is bonded to a breathable elastic film. In another embodiment, a spunbond nonwoven web having machine direction stretch and cross direction stretch, wherein the spunbond nonwoven web is crimped to achieve the machine direction stretch, is bonded to an elastic film. In yet another embodiment, a breathable elastic film is bonded to a necked and creped nonwoven facing material.

#### **Amendment to the Claims**

Claims 1-39 have been examined with no claims being allowed. Amended Claims 1, 22, and 37 are included herein. Marked-up versions of amended Claims 1, 22, and 37 are included at the end of this document.

Applicants have amended Claim 1 to include the limitations of Claim 13, and therefore request cancellation of Claims 11-13. Applicants have further amended Claim 1 to recite an "unnecked" nonwoven facing material. Support for this amendment is found on page 13, lines 3-9.

Applicants have amended Claim 22 to include the limitations of Claim 25, and therefore request cancellation of Claims 24 and 25.

Applicants have amended Claim 37 to include the limitations of Claim 38, and therefore request cancellation of Claim 38.

No new matter has been added by this amendment.

#### **Claim Rejections - 35 USC §112**

The rejection of Claims 11 and 12 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention is respectfully traversed. Applicants have canceled Claims 11 and 12. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

#### **Claim Rejections - 35 USC §103**

The rejection of Claims 1-13, 17, 18, 23, and 26-37 under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,883,028 to Morman et al.

(Morman '028) in view of U.S. Patent No. 5,114,781 to Morman (Morman '781) is respectfully traversed.

Morman '028 teaches a breathable elastic laminate that is stretchable in one direction. More specifically, the laminate is made by bonding a film to a neckable material while the neckable material is in a necked configuration, such that the neckable material is necked when the film is unstretched. As a result, the laminate is stretchable in generally the same direction as the necked material. Morman '028 fails to teach or suggest a biaxial elastic stretch, breathable laminate.

Morman '781 teaches a composite elastic material that can stretch in at least two directions. The composite elastic material includes at least one layer of reversibly necked material joined to at least one elastic sheet. The elastic material is stretched and bonded to the necked material while in the stretched position, consequently causing the reversibly necked material to gather between bond points.

Claim 1 has been amended to include the limitations of Claim 13, which requires the facing material to be elastomeric in a machine direction and in a cross direction. Claim 1 has been further amended to specify that the nonwoven facing material is unnecked. Neither Morman '028 nor Morman '781 teaches or suggests an unnecked elastomeric facing material. Instead, both Morman '028 and Morman '781 use mechanical treatments, such as necking, to impart stretchability to the facing material. Claims 2-10, 17, and 18 depend from amended Claim 1.

Claim 22 has been amended to include the limitations of Claim 25, which recites a crimped spunbond nonwoven web to achieve machine direction stretch. Neither Morman '028 nor Morman '781 teaches or suggests crimping a spunbond web to achieve machine direction stretch. Claims 23 and 26-36 depend from amended Claim 22.

Claim 37 has been amended to include the limitations of Claim 38, which recites a necked and creped nonwoven facing material. Neither Morman '028 nor Morman '781 teaches or suggests creping a nonwoven facing material.

For at least the reasons given above, Applicants respectfully submit that the teachings of Morman '028 in view of Morman '781 fail to teach or suggest

Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

The rejection of Claims 14-16 under 35 USC §103(a) as being unpatentable over Morman '028 in view of Morman '781 further in view of U.S. Patent No. 5,855,999 to McCormack (McCormack) is respectfully traversed.

Claims 14-16 depend from amended Claim 1. Amended Claim 1 requires the nonwoven facing material to be unnecked and to be elastomeric in a machine direction and in a cross direction. As explained above, neither Morman '028 nor Morman '781 teaches or suggests an unnecked elastomeric facing material. Instead, both Morman '028 and Morman '781 use mechanical treatments, such as necking, to impart stretchability to the facing material. McCormack teaches a nonwoven web bonded to a film, but fails to teach a nonwoven web that is elastomeric in a machine direction and in a cross direction, or any sort of biaxial elastic stretch laminate. Even if the teachings of Morman '028 were combined with the teachings of Morman '071 and McCormack, the combined references would still fail to teach or suggest a biaxial elastic stretch, breathable laminate including an unnecked facing material that is elastomeric in a machine direction and in a cross direction.

For at least the reasons given above, Applicants respectfully submit that the teachings of Morman '028 in view of Morman '781 further in view of McCormack fail to teach or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

The rejection of Claims 24, 25, and 38 under 35 USC §103(a) as being unpatentable over Morman '028 in view of Morman '781 further in view of Kadolph et al, Textiles, 1998, Prentice Hall Inc., 8<sup>th</sup> Edition, pp. 76, 395 (Kadolph) is respectfully traversed.

Kadolph teaches the crimping of individual fibers. In contrast, amended Claim 22, which includes the limitations of Claim 25 thus reciting a crimped spunbond nonwoven web to achieve machine direction stretch, claims the crimping of an entire web. Furthermore, neither Morman '028 nor Morman '781 teaches or suggests crimping a spunbond web to achieve machine direction stretch.

Kadolph further teaches that crepeing is useful for imparting softness to a fabric. In contrast, the present invention teaches creping to impart machine direction stretch. There is no suggestion in either Kadolph or Morman '028 or Morman '781 to combine the crepeing definition of Kadolph with the laminates of either Morman '028 or Morman '781 to achieve a biaxial elastic stretch, breathable laminate fluid barrier.

For at least the reasons given above, Applicants respectfully submit that the teachings of Morman '028 in view of Morman '781 further in view of Kadolph fail to teach or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

The rejection of Claims 18-20 under 35 USC §103(a) as being unpatentable over Morman '028 in view of Morman '781 further in view of U.S. Patent No. 6,129,801 to Benson et al. (Benson) is respectfully traversed.

Claims 18-20 depend from amended Claim 1. Claim 1 has been amended to require the facing material to be unnecked and elastomeric in a machine direction and in a cross direction. Benson teaches a stabilized extensible necked material. Neither Benson nor Morman '028 nor Morman '781 teaches or suggests an unnecked elastomeric facing material. Instead, each of the cited references uses mechanical treatments, such as necking, to impart stretchability to the facing material.

For at least the reasons given above, Applicants respectfully submit that the teachings of Morman '028 in view of Morman '781 further in view of Benson fail to teach or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

The rejection of Claim 39 under 35 USC §103(a) as being unpatentable over Morman '028 in view of Morman '781 further in view of U.S. Patent No. 5,554,143 to Roe et al. (Roe) is respectfully traversed.

Roe teaches an absorbent article having a unique waist feature that includes a structural elastic-like film that may be prestretched to give the material added bulk. In contrast, the present invention teaches pre-stretching the film to provide machine direction stretch to the resulting laminate.


Claim 39 depends from amended Claim 37. Claim 37 has been amended to recite a necked nonwoven facing material that is creped and subsequently bonded to the film. Neither Morman '028 nor Morman '781 nor Roe teaches or suggests creping a nonwoven facing material.

For at least the reasons given above, Applicants respectfully submit that the teachings of Morman '028 in view of Morman '781 further in view of Roe fail to teach or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

**Conclusion**

Applicants believe that this case is now in condition for allowance. If the Examiner feels that any issues remain, then Applicants' undersigned attorney would like to discuss the case with the Examiner. The undersigned can be reached at (847) 490-1400.

Respectfully submitted,

  
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**VERSION WITH MARKINGS TO SHOW CHANGES MADE  
IN THE CLAIMS:**

1. (Amended) A biaxial elastic stretch, breathable laminate,  
comprising

a breathable elastic film; and

[a] an unnecked nonwoven facing material, [stretchable in two  
mutually perpendicular directions] elastomeric in a machine direction and in a cross  
direction, bonded to the film;

the laminate having elastic stretch of at least 50% in [a] the machine  
direction and at least 50% in [a] the cross direction.

22. (Amended) A biaxial elastic stretch, breathable laminate,  
comprising:

a water vapor-permeable elastic film comprising a polymer selected  
from [the] a group consisting of polyurethanes, polyether amides, polyester  
elastomers and combinations thereof; and

a spunbond nonwoven web, having machine direction stretch and cross  
direction stretch, bonded to the film, wherein the spunbond nonwoven web is crimped  
to achieve the machine direction stretch.

37. (Amended) A biaxial elastic stretch, breathable laminate fluid  
barrier, comprising

a breathable elastic film; and

a necked nonwoven facing material that is creped and subsequently  
bonded to the film.